

## LESSON PLAN

<b>Department: CSE</b>		<b>Semester: 3<sup>rd</sup> , Name of Faculty : KUMARI JYOTI</b>
<b>Subject: Object Oriented Methodology (OOM)</b>	<b>No. of days/ week Class allotted: 4</b>	<b>Effective From Date: 01.07.2024</b>
		<b>No. of Week- 15</b>
		<b>Topic to be Covered:</b>
<b>Week</b>	<b>Class Day</b>	<b>Theory</b>
<b>1st</b>	1st	<b>UNIT 1: OBJECT ORIENTED PROGRAMMING (OOPS) CONCEPTS</b> <b>1.1 Programming Languages</b>
	2nd	<b>1.2 Object Oriented Programming</b>
	3rd	<b>1.3 OOPS concepts and terminology</b>
	4th	<b>1.4 Benefit of OOPS</b>
<b>2<sup>nd</sup></b>	1st	<b>1.5 Application of OOPS</b>
	2nd	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	3rd	<b>UNIT 2: INTRODUCTION TO JAVA</b> <b>2.1 What is Java ?</b>
	4th	<b>2.2 Execution Model of Java</b> <b>2.3 The Java Virtual Machine</b>
<b>3<sup>rd</sup></b>	1st	<b>2.4 A First Java Program</b> <b>2.5 Variables and Data types</b>
	2nd	<b>2.6 Primitive Datatypes &amp; Declarations</b>
	3rd	<b>2.7 Numeric and Character Literals</b> <b>2.8 String Literals</b>
	4th	<b>2.9 Arrays, Non-Primitive Datatypes</b>
<b>4<sup>th</sup></b>	1st	<b>2.10 Casting and Type Casting</b>
	2nd	<b>2.11 Widening and Narrowing Conversions</b>
	3rd	<b>2.12 Operators and Expressions</b>
	4th	<b>2.13 Control Flow Statements</b>
<b>5<sup>th</sup></b>	1st	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	2nd	<b>UNIT 3: OBJECTS AND CLASSES</b> <b>3.1 Concept and Syntax of class</b>
	3rd	<b>3.2 Defining a Class</b> <b>3.3 Concept and Syntax of Methods</b>
	4th	<b>3.4 Defining Methods</b> <b>3.5 Creating an Object</b>
<b>6<sup>th</sup></b>	1st	<b>3.6 Accessing Class Members</b> <b>3.7 Instance Data and Class Data</b>
	2nd	<b>3.8 Constructors</b> <b>3.9 Access specifiers</b>
	3rd	<b>3.10 Access Modifiers</b> <b>3.11 Access Control</b>

	4th	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
7 <sup>th</sup>	1st	<b>UNIT 4: USING JAVA OBJECTS</b> <b>4.1 String Builder and String Buffer</b>
	2nd	<b>4.2 Methods and Messages</b> <b>4.3 Parameter Passing</b>
	3rd	<b>4.4 Comparing and Identifying Objects</b>
	4th	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
8 <sup>th</sup>	1st	<b>UNIT 5: INHERITANCE</b> <b>5.1 Inheritance in Java</b>
	2nd	<b>5.2 Use of Inheritance</b> <b>5.3 Types of Inheritance</b>
	3rd	<b>5.4 Single Inheritance</b>
	4th	<b>5.5 Multi-level Inheritance</b>
9 <sup>th</sup>	1st	<b>5.6 Hierarchical Inheritance</b>
	2nd	<b>5.7 Hybrid Inheritance</b>
	3rd	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	4th	<b>UNIT 6: POLYMORPHISM</b> <b>6.1 Types of Polymorphism</b>
10 <sup>th</sup>	1st	<b>6.2 Method Overloading</b>
	2nd	<b>6.3 Run time Polymorphism</b>
	3rd	<b>6.4 Method Overriding</b>
	4th	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
11 <sup>th</sup>	1st	<b>UNIT 7: PACKAGES: PUTTING CLASSES TOGETHER</b> <b>7.1 Introduction</b>
	2nd	<b>7.2 Java API Packages</b> <b>7.3 Using System Packages</b>
	3rd	<b>7.4 Naming Convention</b> <b>7.5 Creating Packages</b>
	4th	<b>7.6 Accessing a Package</b> <b>7.7 Using a Package</b>
12 <sup>th</sup>	1st	<b>7.8 Adding a Class to Package</b> <b>7.9 Hiding Classes</b>
	2nd	<b>7.10 Static Import</b>
	3rd	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	4th	<b>UNIT 8: JAVA FILES AND I/O</b> <b>8.1 What is a stream?</b>
13 <sup>th</sup>	1st	<b>8.2 Reading and writing to files(only txt files)</b> <b>8.3 Input and Output Stream</b>
	2nd	<b>8.4 Manipulating Input data</b> <b>8.5 Opening and Closing Streams</b>

	3rd	<b>8.6</b> Predefined streams <b>8.7</b> File handling Classes and Methods
	4th	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
<b>14<sup>th</sup></b>	1st	<b>UNIT 9: EXCEPTION HANDLING</b> <b>9.1</b> Exceptions Overview
	2nd	<b>9.2</b> Exception Keywords <b>9.3</b> Catching Exceptions
	3rd	<b>9.4</b> Using Finally Statement <b>9.5</b> Exception Methods
	4th	<b>9.6</b> Declaring Exceptions <b>9.7</b> Defining and throwing exceptions
<b>15<sup>th</sup></b>	1st	<b>9.8</b> Errors and Runtime Exceptions
	2nd	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	3rd	<b>Revision</b>
	4th	<b>Previous Year Question Discussions</b>

Signature of Faculty

HOD  
Senior Lecture, CSE  
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